

# Hazardous Waste Generation

GSFC has a goal to reduce the amount of hazardous waste the Center generates



## What is a Hazardous Waste?

- A waste with properties that make it dangerous or potentially harmful to human health or the environment.
- It can be a liquid, solid, contained gas, or sludge.
- It can be the by-product of manufacturing processes or discarded commercial products, such as cleaning fluids or pesticides.
- Hazardous waste is regulated under the Resource Conservation and Recovery Act (RCRA), Subtitle C.
- A RCRA-regulated hazardous waste is a waste that appears on one of the four hazardous wastes lists (F-list, K-list, P-list, or U-list), or exhibits at least one of four characteristics—ignitability, corrosivity, reactivity, or toxicity.

# If You Generate Hazardous Waste...

## What do you need to know or do?

- Know when you are generating a hazardous waste (read [GPR 8500.3](#), Waste Management to learn about GSFC's waste management procedures)
- Notify the Safety & Environmental Division (S&E) by calling [6.9233](#) **BEFORE** waste is generated or a new waste stream is identified
- If you are a hazardous waste generator, take the annual required training offered through [SATERN](#) (Course # GSFC-002-07).
- Manage waste properly (e.g., keep containers closed, labeled, and in good condition)
- Use safe practices when handling hazardous materials and waste
- Keep all documentation that was provided by S&E current and readily available (e.g., waste profiles, forms, labels, training records, etc.)
- Use GSFC Form 23-54 when requesting a waste pick-up (include the Waste Stream ID #) (available via GDMS:  
<http://gdms.gsfc.nasa.gov/gdmsnew/home.jsp>)

# If You Generate Hazardous Waste...

## What else do you need to know or do?

- **Do not purchase more of a chemical than you need.** Excess and unused chemicals become hazardous waste, which can be costly to dispose. The more waste you have, the more you pay. Reduce waste through better inventory control up front.
- Use non-hazardous chemical/material substitutions and minimize waste whenever possible
- Check the onsite Chemical Reuse Center (<http://chemx/>) before buying new chemicals

**For hazardous waste collection or questions,  
call S&E at 6-9233 for assistance**

# Universal Waste

Universal wastes are hazardous wastes that are subject to less stringent regulations.

The universal waste regulations streamline collection and management requirements for certain widely-generated hazardous wastes to facilitate environmentally sound collection and proper recycling or treatment. Universal wastes include the following categories:

- Batteries
- Pesticides
- Mercury-containing equipment (e.g., thermostats) and lamps (e.g., fluorescent bulbs)

# Common Universal Wastes

**Fluorescent Lamps** contain mercury and must be managed properly

- Mark container with the notation “Universal Waste Mercury Lamps”
- Date container when the first lamp is added
- May collect lamps for up to one year

**Call S&E at 6-9233 for assistance**

# Common Universal Wastes

**Batteries** other than alkaline contain material normally designated as hazardous waste and need special handling

- Different battery types must be segregated (lead acid, NiCad, lithium, silver, etc.)
- Mark container with the notation “Universal Waste Batteries”
- Date the container when first battery is added
- May collect for up to one year

**Call S&E at 6-9233 for assistance**

# Batteries

- There are bins in some buildings for alkaline batteries. See the Battery Recycling Announcement at <http://environment.gsfc.nasa.gov/Battery%20Recycling.pdf> for more information.
- Alkaline batteries can also be collected and picked-up.

There is an expenditure of government resources for battery disposal; therefore, **only work-related batteries** may be disposed of at GSFC. Check with your county of residence for disposal of personal batteries.

**Call S&E at 6-9233 for assistance**